

Title (en)
Two stroke gasoline internal combustion engine

Title (de)
Fremdgezündete Zweitaktbrennkraftmaschine

Title (fr)
Moteur à essence du type à deux temps

Publication
EP 0802320 A3 19980422 (EN)

Application
EP 97400834 A 19970414

Priority
US 63196296 A 19960415

Abstract (en)
[origin: US5628295A] This disclosure relates to a two-stroke engine comprising an engine frame forming a cylinder, and a piston mounted for reciprocating movement in the cylinder. The engine frame further includes a crankcase chamber and inlet flow passages for fresh mixture, which form a crankcase compression arrangement. The cylinder includes a cylinder wall having an intake port and an exhaust port. The piston is movable in compression and combustion strokes between a top-dead-center (TDC) position and a bottom-dead-center (BDC) position in the cylinder, and the piston includes a piston skirt. Movement of the piston toward the BDC position opens the intake port and the exhaust port, and fresh mixture flows from the crankcase chamber into the cylinder and scavenges the burned gases through the exhaust port. When the piston moves toward the TDC position, the inlet flow passage is opened which allows fresh mixture to flow into the crankcase chamber. The exhaust port is also opened, and burned gases in the exhaust port are also drawn into the crankcase chamber and combined with the fresh mixture.

IPC 1-7
F02M 25/07; **F02B 25/14**

IPC 8 full level
F02B 25/14 (2006.01); **F02B 25/20** (2006.01); **F02M 25/07** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP US)
F02B 25/14 (2013.01 - EP US); **F02B 25/20** (2013.01 - EP US); **F02M 26/01** (2016.02 - EP US); **F02M 26/37** (2016.02 - EP US);
F02B 2075/025 (2013.01 - EP US)

Citation (search report)
• [A] US 5425346 A 19950620 - MAVINAHALLY NAGESH S [US]
• [A] US 4945868 A 19900807 - KLOMP EDWARD D [US]
• [A] US 5357919 A 19941025 - MA THOMAS T [GB]
• [A] US 5267535 A 19931207 - LUO JIH-TZANG [TW]
• [X] PATENT ABSTRACTS OF JAPAN vol. 17, no. 282 (M - 1420) 31 May 1993 (1993-05-31)

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
US 5628295 A 19970513; EP 0802320 A2 19971022; EP 0802320 A3 19980422; NO 971709 D0 19970414; NO 971709 L 19971016

DOCDB simple family (application)
US 63196296 A 19960415; EP 97400834 A 19970414; NO 971709 A 19970414